# -C. SECRIST

Muscaline, Dowa Florist

SEASON 1959 & 1960



M SPECIALIST GERAN



#### READ THESE INSTRUCTIONS CAREFULLY

Claims are very seldom necessary. BUT OPEN CARTONS AT ONCE ON ARRIVAL.

If the shipment shows signs of frost, sweating or damage of any kind, get a "NOTATION OF DAMAGE" from your agent and file a claim at once for a portion or all of the shipment as conditions may warrant. This report must be obtained even though you may think the merchandise is defective. Neither the CARRIER or we will accept responsibility without this inspection report. DO NOT WRITE TO US before doing this as we are in no way responsible for the shipment after it leaves our hands and by the time we do hear from you it is usually too late to file the claim.

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#### TIPS ON ORDERING

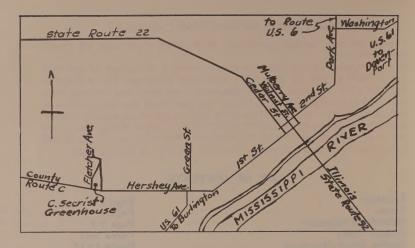
BOOK AHEAD IF AT ALL POSSIBLE. It helps reserve short items. It helps plan shipping dates during rush season.

PAYMENT may be made by check or money order with the order. On reserved orders, payment may be sent anytime before shipping date. Many growers prefer to have their orders sent C.O.D., which may be done with any method of shipping. NO OPEN ACCOUNTS.

We have made arrangements with reliable growers in California to furnish clean unrooted and callused cuttings. These cuttings will be shipped direct from the California growers, and prices are F.O.B. California. Allow three to four weeks on unrooted and five to six weeks on callused.

ENCLOSE YOUR PHONE NUMBER WITH ORDER. We will include it with your address on the package and it helps avoid delays.

If you wish to call long distance, the best time is in the evenings.



#### LOCATION

Our greenhouses are located in Southwest Muscatine, easily reached from U.S.Route No. 61. Coming from the South or West, turn West (left) at the first traffic light, from the North or East follow U.S. No.61 through business district and proceed straight ahead on Hershey Ave. after U.S. 61 turns South. We are located about half a mile West of this junction. It is easily located and if in doubt almost anyone in Muscatine will direct you.

Our location at the base of the bluff hills gives us protection from the cold North wind and still allows us to receive the maximum amount of the scarce winter sunlight. Our cuttings are taken from our own stockplants which, along with the propagating benches occupy almost all the space, the year around. Clean stock plus close periodic inspection by the State of Iowa assure you of clean disease-free stock and allows shipment of stock into 48 states without inspection.



Cuttings in one of the propagating houses.

#### TERMS

Stock offered for sale is available the year around, except when orders exceed the supply. Some novelties are grown only in small quantities and cannot be supplied by the thousands. Orders accepted are subject to cancellation or adjustment in case of crop failure and other conditions beyond our control

MINIMUM WHOLESALE ORDER is 100 cuttings. No wholesale order can be accepted for less than 50 unrooted cuttings of any one variety or 25 of any one rooted variety, except where variety selection is left up to us. Novelties, scented, etc., which have the 10 price included have a minimum of 10 of a kind. Callused Cuttings supplied at \$1.00 per 100 and \$10.00 per 1.000 under rooted prices.

WE DO NO OPEN ACCOUNT BUSINESS. Terms are cash with order, or permission to ship C.O.D. The narrow margin in our type of horticulture does not permit carrying accounts, etc. This is our own rule and is no reflection on anyone's credit. No discounts can be offered as prices are highly competitive. The larger an order is, the more difficult it becomes to protect the customer on short items. Although we enjoy our share of large orders, orders of one to five hundred are appreciated and make up about half of our business. The slight extra charge of the hundred rate offsets the extra cost of packing out the smaller orders. Not less than 750 allowed at the thousand rate. Packing is free.

NAMES ARE TRUE according to the description in this catalog and are based on years of diligent research. In case of error or misunderstanding, in which we are at fault, we will be responsible only to the extent of replacing the original shipment.

PRICES ARE SUBJECT TO CHANGE WITHOUT NOTICE. Present price list cancels all other previous quotations. Stock reserved at at higher quotations will be properly adjusted.

### Methods of Shipment

Muscatine is located on both the Milwaukee and Rock Island main lines. Due to our central location shipments are dispatched directly to all points and seldom require trans-shipment to any major city. Chicago, St. Louis, Omaha, Kansas City and St. Paul are only 12 hours away by rail.

#### AIR FREIGHT

Most Airlines have a minimum charge of at least \$4.00 Minimum weight charges are for 50 lb. 100 lb. is about 20% more, therefor less than several thousand is quite expensive. For a large shipment over a long distance this is the ideal way. Air freight shipments may be sent collect.

#### PARCEL POST with SPECIAL HANDLING or DELIVERY

Parcel post with special delivery or special handling, which allows it to travel with first class mail, is a good way for small lots of 500 or 1,000, if the distance is not too great, up to 250 or 300 miles. This method is not too good during the heat of the Summer or in Winter if it is very cold. Parcel post shipments may be sent C.O.D. but charges are a little high.

### PARCEL POST RATES INCLUDING SPECIAL HANDLING AND INSURANCE

INSURANCE RATE, Up to \$10.00 cost 10¢, \$10.00 to \$50.00 cost 20¢

NUMBER OF		Z	ONES	3		SPECIAL	SPECIAL
CUTTINGS	1-2	3	4	5	6	HANDLING	DELIVERY
100	.43	.49	. 59	.73	.88	.3 5	.45
150	.51	.60	.73	.91	1, 12	.35	.55
200	.59	.70	.87	1.10	1.36	. 50	.55
250	.71	.85	1.07	1.3 7	1.72	.50	.70
300	.79	.96	1.21	1.56	1.96	.50	.70
400	.99	1.21	1.56	2.02	2.56	.50	.70
500	1.18	1.47	1.90	2. 48	1.15	.50	.70

More than 500 cuttings must be packed in more than one box. Insurance can seldom be collected unless entire order is lost or spoiled. In many cases insurance will only be paid if shipment is lost.

Parcel Post is sent charges collect and may be C.O.D.'d for the value of the shipment. Some growers prefer to have the orders sent prepaid and the above table will help in determining the shipping cost. Your post office can tell you what zone you are in from Muscatine, Iowa.

#### RAILWAY EXPRESS

Rail Express is more advisable than Parcel Post, especially during cold or very hot weather; protection against frost is guaranteed. Shipments are insured fully and claims are paid for all or part that are damaged in shipping. Railway Express shipments are made charges collect and the value of the order may be sent C.O.D.

With trains being discontinued this method of shipment is not nearly as good as it was a few years ago and some areas it has become very slow.

#### AIR EXPRESS

Air Express is expensive (40¢ to \$1.00 per lb.), and delays do occur. Not advised except in very special cases.

#### AIR MAIL

Better service than Air Express. Cost 60¢ to 80¢ per pound, plus special delivery fee. Special handling not necessary. Postal collect fee will also cover C.O.D. of order.

#### **Cultural Notes**

Varieties listed in this catalog are not difficult to grow. Any that need special care will have it listed with the description. Remember these ideas set forth here are ideas that work for us and if your conditions vary greatly from ours they may not work for you. If you are already reasonably successful, by all means add any useful knowledge, but don't discard hard won experience and substitute untried (by you) methods. If you know very little about geranium culture, we hope these will help you. If you are a long time grower, perhaps one or more pointers will help you to improve your crop.

LIGHT. Full light for Zonal Geraniums during cold cloudy weather, up to half shade for bright late spring and hot summer. Burning of blooms in spring is due to too much bright sun.

HEAT. Most geraniums will live at 28 to 40 degrees, but they will grow very little and too much water is deadly at those temperatures. At low temperatures spots may appear on the leaves. This may be a true disease brought on by lowered resistance, but we doubt it as the plants will quickly return to normal if given proper heat. Some growers run their houses at 40 to 60 degrees. Plants grown this way should be run on the dry side and fed very little if at all. Resulting plants are slow growing, stocky and solid. Warm grown plants, 60 to 65 degrees, well watered and fed make the fastest plants and a better profit but the plants are softer. However, many customers will pick out the soft plants in the belief that they have the better color and are the best plants. Note that the amount of light and to some extent of heat changes the color of the blooms considerably. Salmon and pink zonals bloomed at low temperatures will have the color pigment flooded to the center of the florets and leave the edges white or streaked. Most pinks will be lighter in winter. One exception is Pink Better Times which is hard to tell from Better Times during dark months

AIR. Most growers insist on plenty of air and open the ventilators, even during freezing weather. We don't believe in heating the outside and ventilate only when the sun warms the houses too much or when they are too humid.



Cuttings as taken from the stock plants. Note how different varieties differ in size of stem. Left to right: Wm. Rogers, Goblin, Better Times.



Same cuttings with leaves removed ready to be placed in rooting medium.

WATER. The commonest cause of plant loss is disease or debility caused by over or under watering. One is as bad as the other. Geraniums should be soaked well and allowed to become reasonably dry but not wilted before watering again. Do not syringe blooming geraniums, it will spoil the blooms if they are wet and in bright sun. If the leaves are dirty a good syringing will help them, if the water has a chance to evaporate within a reasonable time. Syringe only when necessary. Geraniums use lots of water during periods of heavy growth, such as late spring, but can go for long periods without watering in cold cloudy weather. During periods of heavy watering, the plants should be fed so that the water will carry ample food chemicals; otherwise the plants will become waterlogged. We find a good water soluble plant food such as "Plant Marvel" is ideal. Some growers plunge their potted plants during hot summer months. Pots should be set on an inch or two of sand; this keeps the roots from drying out and promotes better color in the leaves.

PINCHING. There are as many rules for pinching as there are growers. If your way works, don't change it. Some people like a long cutting to start with, some a short one. Properly grown they both come out the same. Pot a long cutting low and a short one high and by the time they are in the finished state they will both be the same. Most cuttings from California are long, 4 to 6". Those grown in greenhouses vary, long in months of rapid growth and short in cold winter months. Also there is quite a difference in different varieties. Better Times and Snowball will always be shorter than Salmon Ideal and Lady Jane; likewise, the first two are about the size of a lead pencil, while the last two are as big around as your thumb. We pot the rooted cuttings into 2 1/4" pots and shift to 3" when rootbound. When we shift we light pinch (1/8" from center of the plants that are not already branching). On the next shift to 4", we shape up the plants with another light pinch whenever needed. A hard pinch (about 2"), while it does give another cutting, will set the plant back at least 3 to 5 weeks. If time is not important then it may be worth gaining an extra cutting. There has been a lot written about potting cuttings directly into 4" pots. Better know what you are doing before you try it. Certain fast growing types, such as Lady Jane, will make nice single bloom plants this way. Others that are slower growing will make nothing more than overgrown cuttings. There is still no substitute for work in growing good plants.

#### CUTTING PROPAGATING.

The following method of growing geraniums was used successfully by the Gregersens when they operated their greenhouses in Illinois.

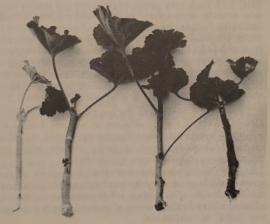
Place inverted four inch pots on the bench to support the flats. Place two thickness of newspaper in the bottom of each flat. Arrange the flats on the inverted pots so they are flush in order to save space and time in filling. Pour the vermiculite into the flats and water down with all the water it will hold (throughly saturate, but no more). It will not be necessary to water again during the entire callousing process. Now trim the cuttings below an appropriate node, cutting straight across. Dip the cuttings in the rooting stimulent using a two pound coffee can or like container for the hormone mixture. Dip the ends of a large handful of cuttings at a time shaking the can so that the mixture covers the tips and ends near the bottom of the cuttings. Insert the cuttings into the vermiculite, no tamping is necessary and the vermiculite will hold them up. Shade as necessary until they can "take" direct sunlight. Forget the cuttings for ten days, then pot into two and one forth inch pots. The cuttings must not be left in the vermiculite more than ten days as it contains no nutritions and the cuttings will starve and become susceptible to disease. Dry off the vermiculite between operations and it may used twice.

We do not sterilize the rooting medium as that destroys the helpful bacteria along with the harmful ones and, after sterilizing, rot will sometimes get into a bed of cuttings and sweep across it destroyind almost the whole bed. We find it much easier to control in an unsterilized bed.

SOIL. Geraniums will grow in almost any soil. The old idea of a tight soil for geraniums has, however, been discarded. For best results a well drained soil will be better. One third sharp sand, one third good loam and one third well rotted cow manure is very good. A good balanced commercial fertilizer, such as Vigoro, can be used in place of the manure; about 7 lbs. to the cubic yard. Add lime to this mixture to take care of the pH. Superphosphate may also be added but not too much, 5 lbs. or under. Superphosphate promotes green growth, but too much and the plants will not bloom. If your soil is poor you can always feed with a

water soluble fertilizer.

Left to right: Unrooted cutting, callused cutting, note how end is swollen with little bumps where roots will grow. On right white roots formed.



#### INSECT AND OTHER PESTS:

CATERPILLARS. Larvel stages of several kinds of moths damage geraniums. The most common are the greenhouse leaf tier, the orange tortrix, and the tobacco budworm. The caterpillars of the tier and the tortrix are similar in appearance, both being whitish, yellowish or greenish and about three-quarters of an inch long when full grown. While both species roll the leaves together with a fine white web, the orange tortrix often bores into flower buds and terminal shoots as well. The larve of other moths commit similar damage.

The caterpillar of the tobacco budworm varies considerably in color, but is usually light green or pinkish with pale longitudinal stripes. It is about one to one and a half inches long when full grown, and feeds upon both flowers and leaves giving them a ragged appearance. It may also bore into the tender terminal shoots.

A spray or dust of DDT will control most of the caterpillars attacking geraniums, but it is not effective against the orange tortrix. DDD or malathion will take care of this pest. A combination of DDT and malathion will keep plants free of almost every other pest also.

APHIDS. These small green, brown or black louselike insects are found in clusters near the tips of young shoots and on the under side of new leaves. They suck the plant juices and carry virus diseases. Easily killed with malathion or nicofume.

ME ALY BUGS. These are whitish woolly relatives of aphids. Usually deposit their eggs in woolly massesto the end of a leaf stalk where it joins the stem, along the tips of new growth, or along the veins on the underside of the leaves. Two thorough applications of malathion will get both insects and eggs.

SOIL MEALY BUGS. Appearance similar to the above except that they live on the fibrous root system sucking the juices from the roots. Drenching the soil with dichlorethyl ether will destroy the insects but a second or third application will be needed to get the eggs. Try this on a small scale to determine if it will injure geraniums. Note injury is more apt to occur if the plants suffer from lack of water.

WHITEFLY. A very small whitish winged insect whose immature stages are scarely noticeable on the undersides of leaves as small, flat scalelike bodies, but the quantity of juices sucked from the plants bring about a serious loss of vigor. Especially troublesome on Martha Washington geraniums. While DDT and malathion will control them, the best and quickest is still cyanogas. Follow directions carefully, be sure there is no water on the leaves or blooms. While this gas burns easily remember that only a small amount is very deadly to whiteflys. Two applications will clear up a stubborn infestation.

MITES. Barely visible to the naked eye, mites distort stems, leaves and often flowers if the infestation is severe. Before flowers are attacked, a brownish network caused by the feeding of the mites will be noticeable on the leaves, followed by corky streaks along the veins. Spray with malathion or aramite, two applications.

THRIPS. Minute insects that feed on juices of many kinds of plants. Quite troublesome on Martha Washington geraniums and most of the Miller Hybreds, also certain other varieties such as Mrs. Richard Gloede, zonal and ivy-leaved crosses and all ivy-leaved geraniums. To control use DDT or malathion.

SNAILS and SLUGS. Metaldehyde dust will control slugs. Metaldehyde baits for the snails.

RED SPIDERS. Tiny red spiders barely visible to the naked eye cause damage that resembles that of mite but, fine white web loop around the afflicted areas. Close inspection will reveal tiny red dots on the webs. This is the same insect that causes the so called "rust" on beans. Excessive dryness usually preceeds an attack of red spiders. Although moisture is deadly to the spiders and an occasional syringing will help prevent and malathion will clean up infested plants. Spray twice about a week apart and then again ten days later.



Rooted cuttings—These are white roots, even if broken off in shipping they may be potted up at once as they will regrow very rapidly. We believe white roots to be best as they take hold better, with less shock to the plants and grow faster.

#### FUNGUS AND BACTERIAL DISEASES:

STEM-ROT and LEAF-SPOT. Both diseases are caused by the same bacterium. Xanthomanas pelargonii. On the leaves it takes the form of small water-soaked areas about one sixteenth inch in diameter appearing on the underside of the leaf and occasionally on the upper surface. The spots enlarge and become more conspicuous and in several days a small water-soaked area may form around the edges of the spot. Several days more and the spot becomes brown, sunken, and dry. If there are many spots on a leaf the whole leaf become yellow and withers and drops from the plant.

The stem rot stage may or may not follow. Infected stems are blackened and shriveled externally, and when split lengthwise a black semidry rot is evident. There may be black streaks on the non-rotted portion of the stems which show the presence of the bacteria in the vascular system. Other characteristic symptom is the upright, almost completely defoliated appearance of large plants with only the terminals of the branches having leaves and they are usually quite small. Plants usually die within three months of the appearance of the first symptoms. Note these are the same symptoms, lack of foliage, etc., that are present with a bad infestation of mites, thrips or red spider.

The cutting-rot stage progresses somewhat slowly from the base upward. The cuttings shrivel and becomes dull black, not shiny black as in Black Leg. This bacterium is present almost every where as it is one found in rotting leaves, etc., where anything damp is piled up. It attacks geraniums only when the plants are weaken by poor culture conditions. Preventive measures are to keep the plants well spaced in a light airy situation and give just enough but not excessive water. Thorough but infrequent waterings are healthier than a daily soaking of the roots. This applies to all fungus and bacterial diseases, the only cure is to prevent.

FUNGUS LEAF-SPOT. Circular spots of light reddish brown with dark brown borders distinguish the fungus leaf-spot caused by Cercospora. spotting of the leaves may also be caused by the fungus Alternaria.

Same control as for bacterium leaf-spot.

BLACK LEG. Pythium stem rot, commonly called black leg, occurs mainly on cuttings, although mature plants are sometimes infected. Like the bacterial stem rot, this fungus infection starts at the base and works upward, the leaves quickly wilt and die. The cuttings shrivel and become shiny black. Although fairly rare the disease is highly infectious and all infected plants should be immediately destroyed.

BOTRYTIS BLIGHT. Water-soaked brown areas on leaves and blossoms become covered with grayish spores when Botrytis is present. This disease is particularly prevalent under conditions of coolness with high humidity. Botrytis and alternaria leaf spot fungi live on dead tissues and grow from dead to living portions of the plant. Remove all dead flowers, leaves, branches and debris to decrease the number of spores in the area. Captan spray used ever five or six days gives good results.

WILT. Verticillium, the soil fungus, occasionally infects geraniums, causing the lower leaves to turn yellow from the margins inward, eventually wilting completely. Shoots may become stunted. Plants should be destroyed and the soil in which they grew should be sterilized before being used again.

#### VIRUS DISEASES:

All reliable growers stock plants are free of disease but, if the cuttings taken from them are poorly grown virus will show up even from the very best stock. Under proper growing conditions virus is no problem. If it does show up destroy the plants and correct the conditions that caused it to appear.

LE AF CURL. This virus is characterized by irregular or circular pale yellow to white spots up to one-fourth inch in diameter. Often the leaves are ruffled, crinkled, dwarfed, or malformed.

MOSAIC. This virus is less severe than leaf curl and appears as light and dark mottling of the leaves and dwarfing of the plant. Treat as for leaf curl.



Rooted cuttings - These are brown (hard) roots, they will not break off in shipping but with this type of roots there is so much shock that the plants usually turn vellow and some may fall off entirely. The plants will recover in about three weeks

#### PHYSIOLOGICAL TROUBLES:

Unfavorable weather or faulty culture bring on these troubles which are often mistaken for true diseases.

EDEMA. Dropsy or edema occurs in greenhouses or in windows that are overcrowed with plants, and has somewhat the effect of leaf spot, with water-soaked areas that become rusty then corky. Ailing plants respond to plenty of air and light, without too much water.

FAILURE TO FLOWER, Poor flowering in P. domesticum is apt to be due to growing plants in temperatures above 60 degrees at night. In P. hortorum varieties it may be caused by late pinching, low temperatures, low light intensity, lack of water during the growing season, or lack of certain nutrients in the soil. P. peltatum and P. hortorum varieties requite temperatures above 55 degrees for successful flowering.

MARGINAL DRYING OF LEAVES. Potash deficiency in the soil is likely to cause this. A balanced fertilizer high in potash content will

remedy this trouble.

LIGHT GREEN LEAVES. Unatural light color in a variety is nitrogen deficiency. Ammonium sulphate or other form of quickly available nitrogen in weak solution is the cure. Several light applications are preferred to a single large dose. A complete chemical fertilizer high in nitrogen in weak solution will also work.

DARK GREEN, DWARFED LEAVES. Abnormally small dark colored leaves indicate phosphorus deficiency. Feeding the plants with super-

phosphate in solution will correct this.

REDDING OF LEAVES. A combinition of factors may cause redding of the leaves followed by drying of the foliage at the base of the plant. Low atmosphere temperature, low soil temperature in the spring, and a low supply of nitrogen all play a part. Correction of the bad environment. or waiting until it corrects itself, so far as outside temperature is concerned, will restore the plants to normal.

LEGGINESS. Lanky plants with sparse foliage at the base often are the result of crowding and insufficient sunlight. For well grown, bushy plants it is necessary to space them more widely as soon as they begin to crowd and give them more sunlight. Legginess is also sometimes caused by inherited traits. When this is true, if the form of the plant is displeasing a different variety can be substituted.

### ZONAL GERANIUMS

Pelargonium Hortorum

#### DOUBLE - - SEMI-DOUBLE

PRICES unless otherwise stated

UNROOTED \$4.50 per 100, \$40.00 per 1,000 ROOTED \$8.50 per 100, \$80.00 per 1,000

#### Scarlet to Clear Dark Red

#### Improved Ricard

Semi-double, regular, light brickred or orange-scarlet. The very large flowers are borne on a solid, fairly compact plant of fast growth. It is a very hardy and excellent pot plant. Heavy thick stems.

#### Olympic Red

Very similar to Improved Ricard as to color and growth. Requires more water and food than most geraniums. The crooked necks just below the flower head is caused by a dry period as the bud is forming.

#### Red Landry

Almost identical to Improved Ricard. Same description covers both.

#### Mitchell's Sensation

Semi-double very large flowers of brilliant scarlet. Very hardy and fine pot plant. Growth same as Improved Ricard. Stronger root system. Reverse side of petals is much lighter.

#### Red Fiat

Similar to Improved Ricard but much weaker growth and root system. Most that are sold in this area are really Improved Ricard. True Fiat will not stand heat.

#### Polly Red

Orange-scarlet, slightly darker and brighter than the above. Mediumsized plants, very good bloomer. Grows almost anywhere. Stems not as large as the above types.

#### REDS

#### Radio Red

Medium-sized, double, brilliant red. The plant is a large grower, extremely rapid, and free flowering. It is a small-wooded type with stems like Better Times. Very good when a rapid growing plant is needed to finish out quickly.

#### Avalon Red

SPORT OF RADIO RED -- Larger flower and larger plant. Since Radio Red has been cleaned up, it is generally considered the better of the two as it is about 1/3 smaller in heighth.

#### Missouri

SANDRA IRENE -- Identical as far as we can tell. Full double, very brilliant clear red, robust low plant with bright dark green foliage. Makes a very good pot plant, but tends to burn in hot dry areas. Early bloomer.

#### Double Dryden

Double, bright, light clear red with white center. Good pot plant. Slightly smaller than any of the above in size. The white center gives the illusion of being lighter in color than it really is.

#### Red Barney

Full double, clear bright dark red on small, low plant with wavy foliage. Excellent pot plant. This is a healthy strain of Red Barney - do not confuse with poor stock that was offered by many growers a few years back.



Left to right: Top row Springtime Irene, Irene, and Pink Giant. Bottom row: Better Times, Magnificent and Painted Lady.

#### ABC Red

Rooted Only \$9.00 per 100, \$85.00 per 1,000 Identical with Radio Red but lower growing and more self-branching. Very early bloomer for the North.

#### TV Red Rooted Only

Strong rapid growth, nearly identical in color and growth to Avalon Red.

#### Bright Dreams

Rooted Only
Supply limited \$9.00 per 100.
SLUMBER---Free blooming sport of
Dreams with bright but soft medium
red double flowers.

#### Helen Michell

Rooted Only

Taller than Red Fiat or Polly Red. The flowers are also larger and slightly more regular Color is the same as Red Fiat. An excellent bedder south of Chicago.

#### Improved Red Fiat

Description identical with Helen Michell.

#### Wyong

Semi double scarlet, slightly darker than Red Fiat and a good bloomer in hot areas. Plant is the same size as Helen Michell.

#### Irene (Behringer)

This variety is gaining in popularity very rapidly. Plant is very fast, almost a rank grower. Color is usually a clear medium red, but at times has a slightly crimson cast. Extremely free blooming the flower heads are made up of enormous semi-double florets, that have a slight tendency to shatter.

#### Dark Red Irene

Unrooted \$4.50 per 100, Rooted \$9.00 per 100, \$85.00 per 1,000 Same as Irene but bright dark red color and do not tend to shatter as much as Irene.

#### Anna Bluedorn

Rooted Only

DARK OLYMPIC---Semi-double dark red that is practically the same as Olympic Red in flower and plant, only the color is darker.

### Reds with Crimson or Ruby Tone

#### Better Times

The leader in this class. Double dark crimson with scarlet splash in center. Very free bloomer on low growing, compact plant. Medium green foliage with no zone. Small stems.

#### Royal Times Rooted Only

Double, clear, light American Beauty red. Half-way between Better Times and Pink Better Times. Everything else same as Better Times.

#### Madder Rose Rooted Only

Dark crimson-red flowers. Fairly large plant with nice size blooms.

#### Magenta Ruby Rooted Only

Double, good sized flowers of dark purple-crimson with a splash of scarlet in the center. Leaves, growth, etc. like Better Times. One of the best in this group.

#### Springfield Violet

Rooted Only \$9.00 per 100, \$85.00 per 1,000

A. M. MAYNE -- Double very largeflowered purple-crimson, sometimes violet. This is the closest approach to a true purple. Rampart grower, so pinch well.

#### Gypsy

#### Rooted only \$9.00 per 100

Double, dark wine-red with a white center. Flowers are good sized, and plant is low and compact. Very unusual color.

#### Violetta

Old time full double, crimson red with a strong bluish cast. A heavy bloomer with medium sized flowers. Very similar to Madder Rose. MARQUISE DE CASTELANE -- Two names for the same plant. Double big round, red crimson flower. Strong pot plant. Large heavy stems.

#### Pride of Camden

CAMDEN NUTT -- Both the same plant. Full double, dark crimson-red. One of the darkest of Florists geraniums. Large plant with small stems. Good bloomer.

#### S. A. Nutt

Similar to Camden but flower heads are flatter, leaf rounder, stems slightly heavier and root system is much weaker. Too much water is deadly. Velvety sheen to bloom makes it appear slightly darker.

#### Monsieur Emile David

Large bluish-rose, double flowers with white centers. Strong plant and a popular old-time variety.



Lady Jane

#### Salmon-Pink

#### Hawkeye Salmonette (lowa State)

New salmon-pink that is short and bushy but still strong growing. It has been acclaimed by those who have tried it.

#### Hawkeye Pink Cloud (Iowa State) Rooted \$9.00 per 100 supply limited Unrooted \$6.00 per 100

New light pink about same color as Enchantress Fiat. Strong growing, short and bushy. A distinct inprovement.

#### Springtime (Behringer) Rooted \$9.00 per 100 Unrooted \$4.50 per 100

Salmon-pink with all the Irene characteristics. Blooms very early.

#### Supply Limited

#### Beaute Poitevine

Shipped from California only. Soft pinkish-salmon, semi-double, large flower on a very strong plant. An oldtimer that still holds it's popularity.

#### **Mme Landry**

Semi-double, rich clear salmon on a strong dependable plant. Prefered by many over Fiat as the flowers do not shatter and the plant is one the best bedders.

#### Salmon Ideal

Identical with Mme. Landry except for barely discernable differences. Both varieties were once the same, separate growing has produced slight differences.

### Enchantress (Not Fiat Enchantress) Rooted Only

Very Strong growing, bright lively double salmon. This is an excellent pot and bedding plant especially for hot areas.

#### Joy (Miller) Rooted Only

Large creamy-white, double flowers margined and flecked with apricotpink on a small plant that blooms freely.

### Mrs. Esham (Pekin Hill Ghs.) Rooted Only

Free flowering, semi-double, rich salmon-pink that is darker than Fiat and almost identical with Maisie

### Maisie (Tonseth 1946) Rooted Only

Long stems hold dark salmon semidouble flowers high above the foliage. This is a excellent pot plant that is similar to Fiat.

### Welcome (Miller) Rooted Only

Fiery salmon-pink, semi-double Fiat type plant that is one of the earlist and most continuous bloomers.

### Always (Miller) Rooted Only

Full double, creamy white florets flushed with soft shrimp-pink on a typical Miller Hybred plant.

### Lullaby (Schmidt) Rooted Only

Strong growing, large double apricotsalmon flowers with light center. A beautiful plant if well watered and fed.

## Susan (Schmidt) Rooted Only \$9.00 per 100 supply limited.

New coral-pink double, color similar to Gorgeous. Nice plant for pots and bedding.

#### Salmon Irene (Behringer)

Rooted Only \$9.00 per 100, \$85.00 per 1,000

Rapid growing plant with flowers very similar in color to Salmon Supreme. Typical Irene blooming and growing qualities.

#### Mme. Jaulin

APPLEBLOSSOM -- Very large semi-double, bright salmon-pink in center with soft cream on the outer edge. During warm weather the colors are reversed. Superb point plant. Very hardy, grow this one in place of Fiat Enchantress and it will grow, not die as Fiat does.

Secrist's Pink

Double, medium-sized, clear light pink flowers. Excellent pot plant, small stems, very compact, vigorous grower but branches so easily that it is almost impossible to get cuttings more than two or three inches long. This is our own introduction, a fixed sport of Snowball. Same green leaves with no zone, more compact and earlier and more profuse bloomer. We are usually behind on our orders for this variety.

#### Magnificent

#### Rooted Only

Enormous semi-double flowers of a rich light salmon pink, slightly brighter than Fiat Enchantress. Introduced by Bode in 1955, this is an excellent plant.

#### Fiat Enchantress

Semi-double soft salmon-pink blooms. It makes nice pot plants, but is delicate for outdoor planting. We prefer several other varieties, but it is still a very good selling plant.

#### Pink Fiat

Semi-double, salmon pink of exceptionally brilliant hue. Self-branching plant with profusion of blooms make this a good pot plant.

#### Elizabeth Bode

#### Rooted Only

Introduced in 1954 by Bode, Enormous double reddish-salmon sport of Improved Ricard

#### Plamier's Salmon Supreme

Semi-double, light, clear salmon. This is the best in it's class and makes an excellent pot plant. Foliage is excellent.

#### Salmon Supreme

(Original) Semi-double to double. Much darker than Palmer's, stockier and taller growth. Unless specifically requested all orders for Salmon Supreme are filled with Palmier's.

#### Picardy

Practically identical to Palmier's Salmon Supreme, but under some conditions shows a little bit of a pink cast. Picardy is a healthy, hardy variety that makes a fine pot plant.

#### Dreams (Miller)

Rooted Only

Full double, good sized flowers of clear salmon-pink that stands well above the fast growing plant.

#### Gorgeous

AVALON BEAUTY--Light pink sport of Pink Fiat, with same type flower. Plant is stronger and taller than Fiat and much more satisfactory for bedding.

#### Orange

Orange Ricard

This is the only orange double used extensively in the trade. Color is a good orange to a slightly scarletorange. Potassium nitrate will make the color quite scarlet. The plant is typically Alphonse Ricard from which it sported.

Jean Vigud

Shipped from California only. Semi-double, lavender-pink with white center. The color is practically the same as California Giant, the flower almost as large. Blooms later than many in this group, but a very strong, heat resistant plant.

#### Reverie (Miller)

Rooted Only

Excellent, large-flowered. light orchid-pink that is very free blooming and with rapid growth.

#### Springfield Shell Pink

Rooted Only

Strong, compact growing plant with a profusion of medium sized double flowers. A very prolific bloomer.

#### Pink Barney

Rooted Only
Full double, deep rose-pink blooms with small white center.

California Giant

Almost identical with Pink Giant. but a full shade lighter in color. A heavy wooded, strong, beautiful variety.

#### American Beauty

Rooted Only The plant is large and very free

blooming with double, very large clear reddish-rose flowers.

> Penny (Penny Irene) Rooted Only

Probably the strongest plant of all Irenes. Free blooming large semidouble, neon-pink flowers.

Beauty of El Segundo Strong growing, free blooming dark pink on a Fiat type plant. Color one shade darker than Pink Fiat.

California Beauty

(Schultz) Semi-double, light rosepink flowers on a low growing plant that makes a fine pot plant.

#### Pink Sensation

New pink introduction that should prove very good.

#### Pink Abundance

Double, very large reddish, rose-pink flowers on a large, fast growing, free blooming plant.

#### Genie (Behringer)

Rooted \$8.50 per 100

Unrooted \$4.50 per 100 supply limited The latest Irene in a rose color. We believe this one will also be tops.

#### Mrs. Richard Gloede

THOMAS MEEHAN -- LOS ANGE-LES BEAUTY -- Double, clear rose with salmon cast. Very good pot plant. Nice dark green foliage with colorful zone.

#### Pink Better Times

EDNA -- Double, dark lavender-pink with white center. This is the true strain, a sport of Better Times. Growth, etc. same as Better Times.

#### Irvington Beauty

Semi-double soft rose with salmon cast. Very heavy bloomer with showy flowers. Good, well known pot variety.

#### Pink Giant

Semi-double, enormous flowers of rose-pink with eye. Low growing, stocky plants.

#### Pink Phenomenal

(PHENOMENAL PINK) -- Almost identical with Pink Giant but the plant is slightly larger.

#### White

#### Mme Buchner

Double, beautiful pure white flower makes this a leading white. Fine early bloomer that is good for Easter sales.

#### Snowball

Identical with Mme. Buchner, but stronger plant and larger flowers. White also a shade purer.

#### Madonna

Double, good sized flowers that bloom early. Small wood stems and plant nearly the same size as Mme. Buchner.

#### Fraicheur

Rooted Only

Double, peotee type, white with very narrow red edge on petals. This is a novel, attractive, and very free blooming plant. It should be pinched watched against overwatering, and fed well.

#### SINGLE ZONALS

Single zonals are brighter colored and generally heavier bloomers then the doubles, but they will shatter before the doubles will. If handled with care this group are money makers as there are colors here that can't be found elsewhere. Most retail customers don't know a double from a single and most singles sell on sight.

#### SALMON

#### Honeymoon

Plant medium size, flower Phloxtype, large, single, apricot salmon with white eye, outer half of the petals are light pale shrimp. Plant is compact and leaves have a dark zone.

#### \$85.00 per 1,000 SCARLET

Rooted Only

#### Herrick

Prices \$9.00 per 100

Compact pot plant. Watch the water, too much and it dies.

Paul Crampel (California Strain) Extremely brilliant orange-scarlet of excellent size blooms carried well above the bright green foliage.

#### CRIMSON

#### Beauty of Glassenwood

BEAUTY OF CHATSWORTH —— BEAUTY of CALIFORNIA- Very fine, light cherry red with small white eye. Compact and free blooming.

#### Will Rogers

Enormous, vivid, purple-crimson flowers. Probably the darkest red so far. Small splash of intense scarlet in the center of each floret. Heavy thick stems and soft grayishgreen foliage. Very good pot plant.

#### Velma

Extremely large garnet red, often six inches in diameter. Very good for dry areas.

#### Mrs. E. G. Hill

Light salmon florets of the pansey type. This is the leading single, and in some sections of the country outsells the double salmons. Very good pot plant.

#### Suzanne Leepre

Very large flowers of rich salmon on a fine study plant. Considered by many to be better than E G Hill

#### MAGENTA

#### Lady Ruth

Dark fuchsia with a scarlet splash at the base of the upper petals. This is the bluish-red color found in no other geranium.

#### ORANGE

#### Admiral Maxime Kovalevski

DIABLO -- Brilliant, clear orange good size and free flowing. Low growing with unzoned foliage makes a fine pot plant.

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#### PAINTED LADY VARIETIES

#### Special Painted Lady offer

Mixed varieties rooted \$8.50 per 100 \$80.00 per 1.000

White centered, the two colors blending from one to the other. White through very light red. When ordering specify variety; Rounder floret than Alice of Vinotherwise a mixture will be sent.

#### Ramona No. 2

er, compact plant.

#### Lady of Spain

Beautiful large, light coral-pink. with a white center.

#### Carmel

White with a narrow margin of bright red around the outer edge of petals. A dependable bloomer and a good pot plant. Carmel is not a "fixed" sport and a fairly high percent will revert toward Alice of Vincennes

#### Alice of Vincennes

White through very light red. Good size blooms, a good pot plant.

#### Rooted Only

Prices \$9.00 per 100 \$85.00 per 1.000

#### Berkley Belle

cennes

#### Cheerio

Orange-salmon, shading to a white White to light pink. Profuse bloom- center. Very profused bloomer.

#### Lady Dryden

Scarlet red with white center

#### Salmon Queen

through brilliant salmon. White Good hardy plant.

#### Painted Ladv

White through light cerise red. This is the one that lends its name to the type. A good pot plant.

#### Ann Sothern

Medium fuchsia on outer edge of petals, shading to a white center.

#### Bougainvillea

Crimson-purple with white center. This is it, beautiful.

#### ZONAL AND IVY-LEAVED CROSSES

Typified by richly colored flowers, with a waxy appearance.

Rooted Only

\$9.00 per 100 \$85.00 per 1.000

#### Irma

salmon - apricot Small double. flowers with a small white center in each floret.

#### E. H. Trego

LOUISE--Enormous double, brilliant scarlet flowers on loosely upright plant. A fine pot plant.

#### Ramona

Full, double, dark vermillion to crimson flowers, often with a deep rose blush. Good compact pot plant.

#### Memories

Semi-double, very large pale orchid flowers, which stand well above a bushy compact plant,

#### IVY-LEAVED GERANIUMS

#### Pelargonium Peltatum

Ivy-leaved geraniums are all low growing plants. They are used for hanging baskets, window boxes and pot plants. Almost all withstand more exposure to hot sun than the zonals.

Unrooted \$5.00 per 100 \$45.00 per 1,000 Rooted \$9.00 per 100 \$85.00 per 1,000

#### Charles Turner

Leading pink, strong grower, rosepink and profuse bloomer.

#### Intensity Red

Waxy scarlet bloom up to two and a half inches across each floret.

#### Joan D'Arc

Single layender flowers on small stemmed compact plant with shield-like leaves.

#### Mrs. Banks

Pure white with crimson veining in throat. Semi-double, strong grower.

#### Cesar Franck

Double blooms of rose-pink with orange markings. Profuse bloomer from April until Christmas.

#### Contesse De Grey

Light pink with a rose cast. Quite popular.

#### Joseph Warren

Double, cerise to purple-cerise on a strong compact plant.

#### Charles Monsolet

Double, cerise to cerise purple on a very strong compact plant.

#### Willy

DARK RED--Double dark red, on a strong plant with neat foliage. One of the finist florist varieties.

#### VARIEGATED-LEAVED

### Rooted only supply limited \$12.00 per 100

#### Sunset (Duke of Edinburgh)

Large single lilac-white. Green shield-shaped leaves with creamy edges which turn magenta-pink if plant is run on the dry side, or given full sun occasionally. This one likes partial or full shade and a cool moist location.

#### Mme. Margot (L'Elegante)

Bright cream or pale yellow leaves with green on small stems. This one is quite different from Margot and likes full sun.



Mme. Margot(L'Elegante)

#### FANCY-LEAVED ZONALS

Rooted Only
Unless noted with variety
Prices \$9.00 per 100
\$85.00 per 1.000

Healthy fancy-leaved zonals are easy to grow. Their restricted green chorophyl area necessitate light feeding more often than the all green leaved varieties. They like a sandy soil, for good drainage, and lots of light.

#### Mountain of Snow

Very attractive green leaf with wide clean white edge. Flowers are single orange-red.

Mme. Languth (Wm)
Unrooted \$5.00 per 100
\$45.00 per 1.000

Very strong grower. Green leaf, edged in creamy white, often has a brownish cast. Flowers are full double, light crimson-red. Equal to many common zonals.

Marechal MacMahon

(MARSHAL MACMAHON) -- Medium habit, bushy, with yellow green leaves with a rust red to bronze brown zone extending well in from the margins. Large single red flowers.

#### Skies of Italy

Beautiful maple shaped leaf, bright yellow with chocolate zone, splashed with scarlet and purple. Color will be improved with a low nitrate diet.

#### Alpha

Semi-dwarf plant with small stems and deeply serrated foliage. Bronzeleafed. Profuse, single red flowers.

#### Happy Thought

Green leaf with yellow center and single red flowers. Plant stems are usually yellow. Good strong plant.



FANCY LEAVED ZONALS:

1.Fair Ellen 2.Alpha 3.Mountain of Snow 4.Mme.Languth 5.Peach 6.Sunset 7.Varigated Rose 8.Mme.Margot 9.Magenta McMahon 10.Distinction 11.Secrist's Red 12.Snowflake 13.Varigated Prince 14.Skies of Italy 15.Mme.Salleron 16.Double Mrs. Pollock 17.Happy Thought 18.Crystal Palace Gem.

#### Secrist's Red

Our own introduction. A sport that is nearly "fixed". Bloom almost the same color of Olympic Red. Not quite as large blooms but many more of them. Very free bloomer and very good at branching, requires almost no pinching. Leaves are a bright green with strong zone that turns red-brown with full sunlight. Stems small but strong, white color stems and bottom of leaves turns red with full sun. Gives a varigated look. Very good pot plant. Stands the Midwest heat very well.

Magenta MacMahaon (Bode 1957) Strong plant of good color with a wide zone and large single fuchsia-red bloom green leaves. Foliage has a pleasthat blends beautifully with the foliage. ant fragrance. Does not bloom.

#### Crystal Palace Gem

Reverse pattern of Happy Thought, Butterflu green and surrounding leaf yellow. Single light red flower.

#### Double Mrs. Pollock

Highly colored zone with yellow leaves. Leaves are rounder than Skies of Italy and plant more dwarf. Double red bloom.

#### Mme. Salleron

(MME, SALLEROI) -- Dwarf (not over six inches) with cream-edged



MAGNIFICENT

#### UNUSUAL GERANIUM NOVELTIES

The following varieties are out of the ordinary and add sparkle to any retailer's line. They are both unusual and beautiful. Most of these grow easily under either proper greenhouse or home conditions. Their scarcity is due to their tender nature which prevents them from wintering in cellars and such places.

BIRD'S FGG

Petals stippled with tiny carmine dots like those found on a bird's egg.

Single Light Pink

Almost white. The speckles show up well.

Single Rose Pink

Excellent flower with good speckles.

Rooted Only \$9.00 per 100 supply limited

Single Coral

Large flower with good speckles.

Double Lavender Pink

Fine, large, double flower with plenty of speckles.

#### ROSEBUD VARIETIES

Rooted Only \$9.00 per 100

The rosebuds are beautiful novelties. The florets are extremely double tiny rosettes which hold their shape throughout the life of the flower. Plants are hardy and dependable and very free flowering. Scarlet Rosebud will not stand being too wet or too dry. Appleblossom and Scarlet bloom early and continuously. Pink and Magenta bloom profusely after May 15th.

#### Appleblossom Rosebud

White, edged with rose. Early.

Pink Rosebud

Bright, pink, largest flower.

Scarlet Rosebud

Vivid, glistening, scarlet, Early,

Magenta Rosebud

Cerise - red rather than magenta.

#### GARDEN HYBRIDS

Rooted only \$9.00 per 100

True garden hybrids of wild species varities. Most of them have kept the basic wild features, yet are acclimated to garden culture.

Old Scarlet Unique

P. FULGIDUM (1) -- Large graygreen plant with soft, deep-cut foliage and an abundance of bright red flowers, blotched on upper petals with black.

#### Sweetheart Geranium

P. ECHINATUM -- Called cactusstemmed geranium because of soft spines on stems. Leaves graygreen with thick, fleshy, much branched stems. Small flowers are beautiful orchid-like blossoms borne in clusters. Blossoms are white to light pink, blotched crimson on upper petals.

#### CACTUS FLOWERED

Very pretty and interesting. Flowers have long narrow petals sometimes straight and flat, sometimes twisted or rolled.

#### Rooted only \$9.00 per 100

#### Morning Star

Splendid double, brilliant light salmon which often has a decided yellow tone. The plant is low and very much self-branching.

#### Southern Cross

Large double, beautiful reddishcoral. Very fine plant.

#### Poinsettia

Long-petaled double, brilliant red. Well-grown plant produces flowers of great beauty. Will not stand (WHITE POINSETTIA) -- Beautiful favorable conditions.

#### Pink Poinsettia

Very double, flowers narrow flat petals of soft pink. Strong plant.

#### Hulda Conn

Full double, salmon flowers, smaller and darker than Morning Star. but very free flowering.

#### Silver Stars

Pure white single with long narrow petals that curve backwards. The flower heads are very large for this type.

#### Noel

drought but is fast growing under curved-petaled double flowers are pure white. Good plant.

#### OTHER NOVELTIES

#### Rooted only \$9.00 per 100

#### Mr. Wren

Flowers are single white, or sometimes very light pink, with the inner two-thirds of the florets solid scarlet. The petals look as if the scarlet had been laid on with a narrow brush in three or four strokes, each ending at a different length on the white.

#### Phlox

BRIGHT EYES -- Single white or very light pink with center half of each floret bright pink or sometimes very light red. Plant low and compact.

#### New Life

DENMARK -- STARS FLAG OF AND STRIPES -- PEPPERMINT STICK -- Miniature florets, seldom a half-inch in diameter, which are curled and twisted. Petals are white and red striped, half and half, or all red and white. The many florets make up a nice sized head, A compact plant.

#### Single New Life

The single florets of scarlet are striped and penciled with white. The plant is compact with dark green Sports freely to New Life foliage. Phlox.

#### New Life Phlox

The florets are light pink, with a salmon or coral center. Compact plant, more free flowering than regular Phlox, but smaller flowers.

#### CARNATION FLOWERED

#### Cerise Carnation

Double, large flowered, well notched petals of a beautiful cerise color. Very robust plant,

#### SCENTED LEAVED GERANIUMS

Rooted only \$9.00 per 100

Each scent listed is distinct from the others. Many have beautiful flowers and some have highly colored foliage. Easy to grow, although some are quite hard to root. Ship well.

#### Lady Plymouth, (Variegated Rose)

P. GRAVEOLENS VARIEGATUM --Excellent light yellow plant with a healthy look. Superb pot plant with rose scent.

#### Old Fashioned Rose

P.G. RAVEOIENS-- Big plant probably the best known of this class. It is the variety most often used in flavoring jellies and preserves.

Crowfoot

RADULA--Parent of most of the rosescented geraniums. The foliage is very deeply cut, almost just rib-stems of bluish-grey Tiny lavender flowers.

Silver-Leaf-Rose, (Grey Lady Plymouth)
P. GRAVEOLENS MARGINALIS -Used in flavoring jellies, etc. Has
a very narrow silver edge. Good
pot plant.

#### Fair Ellen

Well shaped plant with dark green foliage that has a chocolate-brown center. Oak shaped leaves and very free bloomer.

#### Apple Cider

P. FRAGRANS LOGEEI -- Apple and nutmeg cross. Foliage is light bright green. Tiny white flowers.

#### Lime

P. NERVOSUM -- Attractive low, round plant with saw-toothed foliage and nice lavender flowers. Free bloomer. Lime scent.

#### **Pungent Peppermint**

P. DENTICULATUM TOMENTOSUM Fine large, upright plant with deeply cut, gray, foliage, and very sharp distinct peppermint scent.

#### Wormwood

P. ABROTANIFOLIUM -- A woody appearing plant with attractive tiny gray leaves. Foliage is excellent in sachets.

#### Snowflake

P. ADCIFOLIUM -- An irregularly variegated form of Roundleaf Rose. Splashed with yellow, rose scent

#### Apricot (M. Ninon)

P. SCABRUM -- Apricot (more like leaves of apricot) scent. Flowers are brilliant crimson, foliage is deeply toothed, bright, glossy green. Good pot plant.

#### Lady Mary

P. LIMONEUM -- Slight lemon scent. Excellent pot plant with pale orchid flowers with upper petals crimson.

#### Shottesham Pet

Filbert-scented, low, round, light green plant with deeply cut foliage and a myriad of small brilliant red flowers.

#### Peach, (Gooseberry Leaved)

P. GROSSULAROIDES -- Very distinct rich pleasing odor. Plant is compact and upright with foliage close to the stem. The foliage is green and variegated in a pretty hit-and-miss fashion. Flowers are pale orchid.

#### Fern Leaf

P. FILICIFOLIUM -- Strongly pungent, dark green, finely cut foliage that is sticky to the touch. Plant is trim and upright with pale orchid flowers.

Variegated Prince Rupert \$1.35 per 10, \$12.00 per 100 P. CRISPUM VARIEGATUM · Flowers are light fuschia, scent true lemon. Good pot plant.

### Dwarf Geraniums

#### WHAT ARE THE SEMI-DWARFS AND DWARFS?

Dwarfs grow 6 to 8 inches tall in pots and 8 to 12 in garden. Semi-dwarfs are 8 to 10 inches tall in pot culture and up to 18 when grown in the garden. A 4 inch pot plant can be finished out from rooted cuttings in 90 to 100 days. They are fine for borders and bedding.

Dwarfs must have more water and feed than other geraniums. Keep moist at all times and feed with liquid feed every 4 to 5 waterings.

#### Goblin (Kerrigan)

\$1.50 per 10, \$14.00 per 100
Double, good-sized flowers formed
of large close florets of bright red.
The plant is compact and well
formed. A superb variety and
a heavy bloomer.

#### Mme. Fournier

\$1.35 per 10, \$12.00 per 100 Compact, bright red single with dark green foliage. Dependable grower that is a parent of many of today's dwarfs.

#### Mr. Everaarts

\$1.35 per 10, \$12.00 per 100 Imported from Holland, has large double flowers that are rose with a white center. A very compact plant.

### Pigmy \$1.50 per 10, \$14.00 per 100

Similar in habit to Mme Fournier, leaves light green and zoned. Flowers double red. Very small plant.

#### Emma Hossler

\$1.35 per 10, \$12.00 per 100 Another Dutch import that is a double light clear pink with a white center. Very free flowing and a fine pot plant.

#### Little Darling (Kleiner Liebling)

\$1.35 per 10, \$12.00 per 100
Low, compact dwarf with tiny
single rose-pink flowers that literally cover the plant during heavy
blooming periods. The wood is
very small, rising nearly straight
up from the base. The small foliage
is a clear green. Makes excellent
pot plants or is fine in borders.

#### Distinction

#### \$1.50 per 10, \$14.00 per 100

(ONE-IN-A-RING) Very compact plant with bright green roundish leaves, heart-shaped at base. Margin of leaves toothed and crinkled, narrow brown-black zone close to the edge. Flowers are single cherry red.

The International Geranium Society is a group of hobbyists, hybridizers, and commercial growers. A small quarterly magazine is sent to members, considerable publicity work is helping to popularize geraniums, and nomenclature, including registering new varieties, is a prime aim. The Society is worthy of your support.



MEMBER

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Wren (Mr.)	24
Wormwood	25

Baby Tears --- Extra heavy 2¼ inch, \$10.00 per 100.

### Pelargoniums

#### LADY WASHINGTON GERANIUMS

(Pelargonium domesticum)

Rooted Only \$10.00 per 100 from October on.

Culture Notes: A lush pelargonium will not bloom, therefore make plant growth easily with normal culture. Do not use long lasting fertilizers which will keep plant at rapid growth into flowering season. Keep pH up especially near budding season, 6.0 to 7.0 at all times. Grow cool, 40 degrees night temperatures will make good stocky plants. Do not feed 10 weeks before blooming time until buds set then feeding may be resumed but keep nitrates low. Do not starve plant for nitrogen however. Keep the plant a little on the dry side while buds are being formed. Don't force with heat, always give lots of light and don't shade. Shade may be applied to blooming plants and will help the blooms.

Flower shattering of modern varities is due to removing plants from a warm

house into cooler or drafty surroundings.

Pelargoniums grown under cool conditions will seldom shatter.

